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| EXAMINER |
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HEYI, HENOK G

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| ART UNIT | PAPER NUMBER |
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2609

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/827,012 | Applicant(s) DIERKS, DIETER | |
| | Examiner Henok G. Heyi | Art Unit 2609 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-15 is/are rejected.
- 7) ☒ Claim(s) 11 and 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claim 1-3, 7-10 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weidner US 6,205,112 B1 as applied to claim 1 above, and further in view of Usami et al. US 5244774 A (Usami hereinafter).

Re claim 1, Weidner discloses a digital optical data carrier in disc format comprising at least two separate discs adhered together, one of said discs having data storage in CD-format, and the other disc having data storage in DVD-format (see col 3 line 55-60, col 4 line 15-col 5 line 35 and fig. 2B), but Weidner does not mention about the surface of the

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data carrier having an optically readable information printed directly onto the disc with a dye absorbing visible light. However, Usami teaches recording layer made of dyes that absorb light (col 8, lines 3-15). Therefore, the combined teaching of Weidner and Usami as a whole would have rendered obvious to use light absorbing dyes to print optical readable information onto the disc.

Re claim 2, Weidner discloses that the data storage is in the area of the disc, but Weidner does not specifically show where the readable information is. However, Usami teaches that the dye-recording layer absorbs a laser beam and forms pits on the substrate for data recording purposes (col 2 line 35). The combined teaching of Weidner and Usami as a whole would have rendered obvious to form pits on the outer substrate of the disc using dye for recording purposes.

Re claim 3, Weidner teaches about disc with data storage in multiple formats (col 3 line 36-col 4 line 64), but Weidner does not teach specifically how the optical readable data is printed on the disc with a dye. However, Usami teaches that the dye-recording layer absorbs a laser beam and forms pits on the substrate for data recording purposes (col 2 line 35). The combined teaching of Weidner and Usami as a whole would have rendered obvious to form pits on the outer substrate of the disc using dye for recording purposes.

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Re claim 7, Weidner discloses that one data encoded area on each side with both sides having different formats, but Weidner does not disclose about permanently storing data on the disc surface. However, Usami teaches about dye-recording layer that absorbs a laser beam and forms pits on the substrate for data recording purposes but Usami does not mention about permanently storing data on the disc surface. However, the examiner take the official notice that the data recorded on disc with pits on DVDs and CDs are permanent. Therefore, the combined teaching of Weidner and Usami as a whole with the permanently storing data on the disc surface as well known in the art would have rendered obvious permanently storing data on a disc surface in order to secure the data stored in the disc.

Re claim 8, Weidner teaches about a DVD disc surface carrying normally readable information about the record on the CD-disc surface. (see col 4 lines 24-29). Therefore, the combined teaching of Weidner and Usami as a whole would have rendered obvious for DVD disc surface to carry a thin film of readable information about the record on the CD-disc surface.

Re claim 9, Weidner discloses about a digital optical data carrier comprising two discs and an intermediate layer, but he does not specifically mention about three discs. However, Usami teaches about three layers being superimposed into one data carrier (see Abstract and col 6 line40-45) and the recorded signals were able to be read out (col 41 lines 10-30). Therefore, the combined teaching of Weidner and Usami as a

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whole would have rendered obvious to have a middle layer between the two discs with two different formats. The motivation for combining these two prior arts, as thought by Usami is the middle layer could be used to record the formats of the other two discs as pre-pits.

Re claim 10, Weidner discloses about a digital optical data carrier with one side a DVD surface. Furthermore, Weidner teaches about the two formats on each side of the disc are readable by at least two different types of readers wherein the first data format and the second data format are different so as to enable the first data format to be read on a first reader, the first reader being incapable of reading the second data format. That means the DVD could not read the laser for the CD (col 5 line 27-33).

Re claim 12, Weidner discloses about a digital optical data carrier but does not teach about the optically readable data being below the surface. However, Usami teaches about a laser beam reproducing an inner layer of the disc (col 9 lines 31-35). Therefore, the combined teaching of Weidner and Usami as a whole would have rendered obvious to have a middle layer carrying data to be reproduced.

Re claim 13, Weidner discloses a digital optical data carrier comprising three layers; the central layer carrying said optically readable data, which is not readable by laser (see col 6 line 40-45).

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Re claim 14 is rejected as claim 1 above; furthermore, Weidner discloses a digital optical data carrier that at least one disc has a surface carrying an optically readable mark, which a standard user may easily read, the mark indicating the format of the data storage of the disc, CD or DVD (see fig 3 and 4) and this is a widely known in the art.

Re claim 15, Weidner discloses that the data storage is in the area of the disc but he does not specifically show where the readable information is. However, Usami teaches that the dye-recording layer absorbs a laser beam and forms pits on the substrate for data recording purposes (col 2 line 35). The combined teaching of Weidner and Usami as a whole would have rendered obvious to form pits on the outer substrate of the disc using dye for recording purposes.

4. Claims 4, 5, 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weidner US 6,205,112 B1 (Weidner hereinafter) and further in view of Usami and Kubotera et al. US 4,297,436 (Kubotera hereinafter).

Re claim 4, Weidner discloses digital optical data carrier, but does not teach about the wavelength of the absorbed light. Usami teaches about the wavelength range between 50 and 200 not between 300 and 525. However, Kubotera teaches about the dye used to absorb radiation between 290 to 450nm (col 5 line 18-25). Therefore, the combined teaching of Weidner, Usami and Kubotera as a whole would have rendered obvious to use a dye that absorbs light in the specified wavelengths range. The motivation to

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combine the above three arts as taught by Kubotera is visible light wavelength ranges from 380 to 780.

Re claim 5, Weidner discloses a digital optical data carrier but Weidner does not mention what kind of dye is used to print optically readable information on the disc. However, Usami teaches a merocyanine dye is used for the benefit of shorter wavelength (col 8 line 17). Therefore, the combined teaching of Weidner, Usami and Kubotera as a whole would have rendered obvious to use merocyanine dye to achieve absorption of small wavelength light.

Re claim 6, Weidner discloses about digital optical data carrier but it doesn't mention what kind of dye from what group to use for printing it on a disc. However, Usami teaches a merocyanine dye is used for the benefit of shorter wavelength (col 8 line 17). Therefore, the combined teaching of Weidner, Usami and Kubotera as a whole would have rendered obvious to use merocyanine dye to achieve absorption of small wavelength light.

Re claim 16, Weidner discloses optical data carrier wherein the disc with data storage in DVD-format has a surface containing optically readable data printed directly onto the disc (col 3 lines 25-30), but he doesn't mention about choosing a specific color. However, Kubotera discloses using a Kubotera teaches about the dye used to absorb radiation between 290 to 450nm (col 5 line 18-25). Examiner takes official notice that in

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the given wavelength it is possible to choose specific color that can be seen by humans and is transparent for a laser at the same time.

5. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weidner US 6,205,112 B1 (Weidner hereinafter) and further in view of Usami and Adolph et al. US 6,370,323 B1 (Adolph hereinafter).

Re claim 11, Weidner discloses a digital optical data carrier, but he does not mention the foil. However, Adolph teaches that DVDs are made up of reflective aluminum foil encased in clear plastic (col 1 lines 20-25). Therefore, the combined teaching of Weidner, Usami and Adolph as a whole would have rendered obvious to have DVDs that enclose at least one foil on the disc in order to protect the disc..

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henok G. Heyi whose telephone number is (571) 272-1816. The examiner can normally be reached on Monday to Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HGH



KIEU-OANH BUI
PRIMARY EXAMINER